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AMENDMENT UNDER 35 U.S.C. § 135(b)  
GROUP ART UNIT 2711

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Chandrakant Bhailalbhai PATEL et al.

Application No.: 09/140,752  
Continuation of 08/266,753

Group Art Unit: 2711

Filed: August 25, 1998

Examiner: Unknown

For: RADIO RECEIVER FOR RECEIVING BOTH VSB AND QAM DIGITAL HDTV SIGNALS

**THIRD PRELIMINARY AMENDMENT UNDER 35 U.S.C. § 135(b) AND  
37 C.F.R. § 1.606 COPYING CLAIMS FOR PURPOSES OF INTERFERENCE**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Kindly add the following new claims:

10/05/1999 MFLETCHER 00000007 194880 09140752

01 EC:102 390.00 CH  
02 FC:103 720.00 CH

Sub F1 100  
-- 79. In a system for receiving a modulated signal from multiple types of transmission channels, said signal being representative of compressed digital data coded in one of a plurality of coding formats and exhibiting one of a plurality of modulation formats, a method comprising the steps of:

7. selecting a modulation format for demodulation from among modulation formats including a QAM format and including another modulation format;

demodulating said modulated signal according to said selected modulation format to produce a demodulated signal;

selecting a coding format for decoding from among said plurality of coding formats; and

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decoding said demodulated signal according to said selected coding format to produce a demodulated and decoded signal.

<sup>101</sup>  
~~80~~. A method according to claim <sup>100</sup>~~79~~, wherein said modulation formats also include PAM.

<sup>102</sup>  
~~81~~. A method according to claim <sup>101</sup>~~80~~, wherein said PAM is received as a vestigial-sideband amplitude-modulation.

<sup>103</sup>  
~~82~~. A method according to claim <sup>100</sup>~~79~~, wherein said plurality of coding formats includes punctured coded and trellis coded formats.

<sup>104</sup>  
~~83~~. A method according to claim <sup>100</sup>~~79~~, wherein said plurality of coding formats includes trellis coded formats.

<sup>105</sup>  
~~84~~. A method according to claim <sup>104</sup>~~83~~, wherein at least one of said trellis coded formats is a punctured coded format.

<sup>106</sup>  
~~85~~. A method according to claim <sup>100</sup>~~79~~, wherein said step of selecting a modulation format includes a step of selecting between multiple types of transmission channels including at least two channels from among satellite, cable and terrestrial channels.

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~~86.~~ A method according to claim <sup>100</sup>~~79~~, wherein said QAM format is QPSK.

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~~87.~~ In a system for receiving a modulated signal from multiple types of transmission channels, said signal being representative of compressed digital data coded in one of a plurality of coding formats and exhibiting one of a plurality of modulation formats, said multiple types of transmission channels including at least two channels from among satellite, cable and terrestrial channels, signal processing apparatus comprising:

a demodulator for selectively demodulating said modulated signal from among modulation formats including PAM and including QAM to produce a demodulated signal; and

a decoder for selectively decoding said demodulated signal from among coding formats including punctured coded and trellis coded formats to produce a demodulated and decoded signal.

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~~88.~~ In a system for receiving a modulated signal from multiple types of transmission channels, said signal being representative of compressed digital data coded in one of a plurality of coding formats and exhibiting one of a plurality of modulation formats, said multiple types of transmission channels including at least two channels from among satellite, cable and terrestrial channels, signal processing apparatus comprising:

a demodulator for selectively demodulating said modulated signal from among modulation formats including PAM and including QAM to produce a demodulated signal; and

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a decoder for selectively decoding said demodulated signal from among coding formats including trellis coded formats to produce a demodulated and decoded signal.

<sup>110</sup>  
~~89~~. Apparatus according to claim <sup>109</sup>~~88~~, wherein at least one of said trellis coded formats is a punctured coded format.

<sup>111</sup>  
~~90~~. Apparatus according to one of claims <sup>108</sup>~~87~~ and <sup>109</sup>~~88~~, wherein said data is video information.

<sup>112</sup>  
~~91~~. Apparatus according to claim <sup>111</sup>~~90~~, wherein said video information is television picture information.

<sup>113</sup>  
~~92~~. Apparatus according to one of claims <sup>108</sup>~~87~~ and <sup>109</sup>~~88~~, wherein said data is television information, including video information and sound information.

<sup>114</sup>  
~~93~~. In a system for receiving a modulated signal from multiple types of transmission channels, said signal being representative of compressed digital data coded in one of a plurality of coding formats and exhibiting one of a plurality of modulation formats, a method comprising the steps of:

selecting a modulation format for demodulation from among said plurality of modulation formats;

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demodulating said modulated signal according to said selected modulation format to produce a demodulated signal;

selecting a coding format for decoding from among coding formats including punctured coded and trellis coded formats; and

decoding said demodulated signal according to said selected coding format to produce a demodulated and decoded signal.

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~~94.~~ In a system for receiving a modulated signal from multiple types of transmission channels, said signal being representative of compressed digital data coded in one of a plurality of coding formats and exhibiting one of a plurality of modulation formats, a method comprising the steps of:

selecting a modulation format for demodulation from among said plurality of modulation formats;

demodulating said modulated signal according to said selected modulation format to produce a demodulated signal;

selecting a coding format for decoding from among coding formats including trellis coded formats; and

decoding said demodulated signal according to said selected coding format to produce a demodulated and decoded signal.

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<sup>116</sup>  
~~95~~. Apparatus according to claim <sup>115</sup>~~94~~, wherein at least one of said trellis coded formats is a punctured coded format.

<sup>117</sup>  
~~96~~. A method according to one of claims <sup>114</sup>~~93~~ and <sup>115</sup>~~94~~, wherein said plurality of modulation formats includes a QAM format.

<sup>118</sup>  
~~97~~. A method according to claim <sup>117</sup>~~96~~, wherein said QAM format is QPSK.

<sup>119</sup>  
~~98~~. A method according to claim <sup>117</sup>~~96~~, wherein said plurality of modulation formats includes PAM.

<sup>120</sup>  
~~99~~. A method according to claim <sup>119</sup>~~98~~, wherein said PAM is received as a vestigial-sideband amplitude-modulation.

<sup>121</sup>  
~~100~~. A method according to one of claims <sup>114</sup>~~93~~ and <sup>115</sup>~~94~~, wherein said step of selecting a modulation format includes a step of selecting between multiple types of transmission channels including at least two channels from among satellite, cable and terrestrial channels. --

REMARKS

Applicants have recently learned of the existence of U.S. Patent No. 5,717,471 to Stewart, entitled "APPARATUS FOR DEMODULATING AND DECODING SATELLITE,

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TERRESTRIAL AND CABLE TRANSMITTED DIGITAL TELEVISION DATA". This patent relates to a signal processing apparatus, particularly an HDTV or other digital television receiver, and a demodulation and decoding method, which have the capability of decoding signals of different formats, including such formats as DVB, DSS, etc. The patent discloses that this is achieved by selective demodulation and selective decoding chosen based upon applicable modulation and coding formats.

With this Third Preliminary Amendment, claims 2 through 100 are now pending in the present application. Claims 79, 80, 82 through 98, and 100 represent verbatim or substantial copies of claims 1-7 and 10-14 of the Stewart '471 Patent, and thus interfere with the claimed subject matter of the patent.

In compliance with 35 U.S.C. § 135(b) and 37 C.F.R. § 1.606, Applicants present the copied claims within one year of the issue date of the Stewart '471 Patent. Applicants will file their formal request for the initiation of interference proceedings, in compliance with 37 C.F.R. § 1.607, in the near future.

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Entry of the present Amendment is respectfully requested.

Respectfully submitted,



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